

Product datasheet for **MG222844**

Rpgr (NM_001177950) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rpgr (NM_001177950) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rpgr
Synonyms:	Rd9; Rp3h
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222844 representing NM_001177950 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCAAGAGGGTCGCGATGGGGTCCCAGGGGTAGGGCAGCACCTTAGGCTCAATCGAGTCGCCCTG
CTATCTTCCGAAGCAGGCACAGATTCCGTTTCGAGGCTTCGGCATGGCGGAATCTGAGTCACTGGTGCC
CGATACAGGTGCTGTGTTACGTTTGGAAAACTAAATTTGCCGAAAATATTCCTAGCAAATCTGGTTT
AAAAATGACATACCCATATGTCTTTCATGTGGAGATGAACATACTGCTATTGTTACAGGAAATAATAAT
TGTACATGTTTCGGCAGTAACAACCTGGGGTCAGTTAGGATTAGGATCAAAAGCTGCTATCATCAAGCCAAC
ATGATCAAAAGCTCTTAAGCCTGAGAAGGTGAAACTTGCTGCCTGTGGAAGGAACCAACACCTTAGTTTCA
ACAGATACTGGTGGCGTATATGCAGCTGGTGGAAATAATGAAGGTCAACTGGGGCTTGGTACACTGACG
ATAGAGACACCTTTCATCAAATGTCTTTCACCTGCTGATACCATTAACAGCTCTCTGCTGGCGC
CAATACATCCGCTGCTCTTACTGAGGATGGAAAATTTTTATGTGGGGTGAACAATTCGAAGGCGAGATT
GGTCTAGAAGATAAAAGTAATGTATGTATCCCTCATGAAGTGACTGTTGGAAAGCCAATTCCTGGATCT
CTTGTGGATATTACCATTAGCTTTTGTAAATGGATGGGGAGCTCTACACATTTGGAGAACCAGGAA
TGGGAAGTTGGCCTTCCAATGAGCTGCTGATGAATCACAGATCACCCAGCGTGTGCTGGCATTCTCT
GAGAGGGTCATTCAAGTGGCCTGTGGTGGAGGGCACACTGTGGTTCTCACAGAGAAAGTTGTGTATGCCT
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TGAGCGTATTAAGGATCAGAAAATATGTATATTTCTGTGGAGAAAACCATACAGCTTTGATGACAGAA
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ATCAGTTCTTCTACCTTGTGCTCTAATTTTTGAGATTTGCAGTTCAATTGATTGCCTGTGGTGGATG
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AATAACTACCCAGAGAAAAGCCCTCTGAATCAATGGAGCCACTGGACTCAGATTATTTTGAAGATAAAA
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 ACAGGTCAGAACTGATGCAGAACTAATGATCCACTCCAGAGATAAAGCCAAATAGGAGATCAGATAG
 CCTTACAAAAGTGATAAGAAAGATGCCAACCAAGCACATGGGTCAAAATCTTCAGGATTCGACAACACC
 AAATATGGAGGGAAAGTCCAATCTGTACAATTCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222844 representing NM_001177950
 Red=Cloning site Green=Tags(s)

MPRGRSRWGSQVGVQHLRLNRVAPAI FPKQAQIPFAGFGMAESES LVPDTGAVFTFGKTKFAENIPSKFWF
 KNDIPICLSCGDEHTAIVTGNNKLYMFGSNNWQGLGLGSKAAIIKPTCIKALKPEKVKLAACGRNHTLVS
 TDTGGVYAAGGNNEGQLGLGDTDDRDTFHQIVFFTPADTIKQLSAGANTSAALEDGKLFMWGDNSEGQI
 GLEDKSNVCIPHEVTVGKPI SWISCGYYHSAFVTMDGELYTFGEPENGLGLPNELLMNHRSPQRVLGIP
 ERVIQVACGGGHTVVLTEKVYAFGLGQFGQLGLGTFLFETSEPKI IERIKDQKICHISCGENHTALMTE
 LGLLYTFGDGRHGKLG LGMENFTNQFFPTLCSNFLRFVQLIACGGCHMLVFATPRLGTIDEPKFEDVYE
 PYISTGSFSINDLSPRSSLNRSL SARLRRRERERPPCSASMVGTLPPLEGTSASTSAYFYPSPPFHL SV
 NNYPEKSPSESMELDSDYFEDKMNKDTE TENSSAVDSENFGETNDILNMTHMMTTSSNEKLLDFSPIQK
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 EPRVFTDGKGLQSKQVKGESDEEIVSEKTEVMEVADVKKIRESEENSKSDSLFDDL PDKTMNSESEDNK
 DIAEERRSSEQNMTF DSETELVEEPDSYMECERHSEQSAEELEQPKLVEYSSEEKDEKDEKDDDEVETE
 NLWYDRNCTEQETENVFRA TRFFPKFDLKHDLSGIPEEQEGPEDSEGNVVVEQVVAQKENLEFEGDRK
 EAKAEAPSDVITEKEAPQLSETVKPEEGEMDEEISILNVEDTVEEERKEGEKEIVEEGSIPETEGSETID
 ITDEKLDEVLKEEDSASLLQRALREYNENPKGHMYDRVKSSSSEILGGNDPTSKDIKKAKKISFFNRMSL
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TRTRPLE - GFP Tag - V

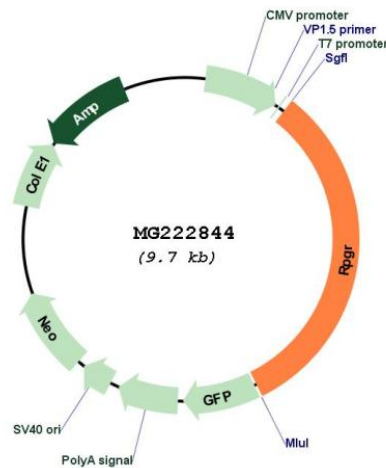
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001177950

ORF Size: 3117 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_001177950.1</u> , <u>NP_001171421.1</u>
RefSeq Size:	3680 bp
RefSeq ORF:	3120 bp
Locus ID:	19893
Cytogenetics:	X A1.1
Gene Summary:	Could be a guanine-nucleotide releasing factor (By similarity). Plays a role in ciliogenesis (By similarity). Probably regulates cilia formation by regulating actin stress filaments and cell contractility (By similarity). May be involved in microtubule organization and regulation of transport in primary cilia (By similarity). Plays an important role in photoreceptor integrity. Isoform 5 may play a critical role in spermatogenesis and in intraflagellar transport processes. [UniProtKB/Swiss-Prot Function]